N° 4628 A.D. 1900

Date of Application, 10th Mar., 1900
Complete Specification Left, 10th Jan., 1901—Accepted, 16th Feb., 1901

PROVISIONAL SPECIFICATION.

Improvements in Devices for use in taking Dental Impressions.

I, Herman Dagett Osgood, of No. 372, Boylston Street, in the City of Boston, County of Suffolk and State of Massachusetts, United States of America, Dentist, do hereby declare the nature of this invention to be as follows:—

This invention relates to appliances used by dentists in taking an impression of the roof of the mouth and the adjoining parts. The invention has for its object to provide a cup adapted to retain the plaster displaced while the impression is being taken, thus preventing the displaced plaster from falling into the throat of the patient, and capable of being easily taken apart to be cleaned.

My improved cup comprises two general parts, namely, a body portion, which includes a bottom plate, and a U-shaped flange rising from the margin of said plate, and an arched plate having its margin formed to fit the inner surface of the flange, said plate including a flat or seat portion adapted to rest on the bottom plate of the body of the cup, and an arched portion which is formed to approximately fit the roof of the patient's mouth. The arched portion is struck up from the body of the blank from which it is made, said arched portion having no bottom. A flange is formed on one end of the arched plate, said flange filling or nearly filling the opening between the ends of the flange when the two parts are assembled.

The flange is provided with a series of inwardly projecting pins or lugs which project over the bottom plate and are in position to bear upon the upper edge of the marginal portion of the arched plate when the two parts are assembled, the pins holding the marginal portion of the arched plate in close contact with the bottom plate. The arched plate has an opening which when the parts are assembled forms the mouth of a cavity or chamber adapted to receive the surplus plastic material used in making an impression of the roof of the mouth. A vent-hole is formed in a wall of the cavity or chamber and preferably in the said bottom plate, its object being to permit the air in said chamber to be displaced by the plastic material which enters the chamber, thus permitting the plastic material to freely enter the chamber. When the device is used, the arched plate is placed upon the bottom plate, and a dam is formed by placing a strip of wax or other suitable material against the inner side of the flange of the arched plate, said strip extending outwardly beyond the ends of the U-shaped flange of the body portion. The pins hold the arched plate down upon the bottom plate of the body portion; but if desired, this may be supplemented by small pieces of wax placed, when melted, in the angle formed by the U-shaped flange and the marginal portion of the arched plate, thus holding the latter securely. After the use of the cup the dam is removed, and the two parts are separated, so that all portions of the surfaces may be easily cleaned.

Dated this 10th day of March 1900.

HASELTINE, LAKE & Co.,
45, Southampton Buildings, London, W.C., Agents for the Applicant.

[*Price 8d.*]

COMPLETE SPECIFICATION.

Improvements in Devices for use in taking Dental Impressions.

I, Herman Dagett Osgood, of No. 372, Boylston Street, in the City of Boston, County of Suffolk and State of Massachusetts, United States of America, Dentist, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to appliances used by dentists in taking an impression of the roof of the mouth and the adjoining parts. The invention has for its object to provide a cup adapted to retain the plaster displaced while the impression is being taken, thus preventing the displaced plaster from falling into the throat of the patient, and capable of being easily taken apart to be cleaned.

My improved cup comprises two general parts, namely, a body portion, which includes a bottom plate, and a U-shaped flange rising from the margin of said plate, and an arched plate having its margin formed to fit the inner surface of the flange, said plate including a flat or seat portion adapted to rest on the bottom plate of the body of the cup, and an arched portion which is formed to approximately fit the roof of the patient's mouth. The arched portion is struck up from the body of the blank from which it is made, said arched portion having no bottom. A flange is formed on one end of the arched plate, said flange filling or nearly filling the opening between the ends of the flange when the two parts are assembled.

The flange is provided with a series of inwardly projecting pins or lugs which project over the bottom plate and are in position to bear upon the upper edge of the marginal portion of the arched plate when the two parts are assembled, the pins holding the marginal portion of the arched plate in close contact with the bottom plate. The arched plate has an opening which when the parts are assembled forms the mouth of a cavity or chamber adapted to receive the surplus plastic material used in making an impression of the roof of the mouth. A vent-hole is formed in a wall of the cavity or chamber, and preferably in the said bottom plate, its object being to permit the air in said chamber to be displaced by the plastic material which enters the chamber, thus permitting the plastic material to freely enter the chamber. When the device is used, the arched plate is placed upon the bottom plate, and a dam is formed by placing a strip of wax or other suitable material against the inner side of the flange of the arched plate, said strip extending outwardly beyond the ends of the U-shaped flange of the body portion. The pins hold the arched plate down upon the bottom plate of the body portion; but if desired, this may be supplemented by small pieces of wax placed, when melted, in the angle formed by the U-shaped flange and the marginal portion of the arched plate, thus holding the latter securely. After the use of the cup the dam is removed, and the two parts are separated, so that all portions of the surfaces may be easily cleaned.

Of the accompanying drawings, forming a part of this specification,—

Figures 1 and 2 represent plan views of the parts of a dental impression-cup embodying my invention, the parts being separated.

Figure 3 represents a longitudinal section through the center of the cup, showing the parts connected, and a confining strip or dam in place.

Figure 4 represents a section on line 4—4 of Figure 1.

Figure 5 represents a section on line 5—5 of Figure 2, The same reference characters indicate the same parts in all the figures.

My improved cup comprises two general parts, namely, a body portion, which includes a bottom plate a^1 and a U-shaped flange rising from the margin of said plate, as shown in Figures 1 and 4, and an arched plate having its margin formed to fit the inner surface of the flange a, said plate including the flat or seat portion a^3 adapted to rest on the bottom plate a^1 of the body of the cup, and the arched portion a^2 which is formed to approximately fit the roof of the patient's mouth. The arched portion a^2 is struck up from the body of the blank from which it is made, said arched portion having no bottom. A flange b^1 is formed on one end of the arched plate, said flange filling or nearly filling the opening between the ends of the flange a when the two parts are assembled.

The flange a is provided with a series of inwardly projecting pins or lugs c^2, which project over the bottom plate a^1 and are in position to bear upon the upper edge of the marginal portions a^3 of the arched plate when the two parts are assembled, the pins holding the marginal portion of the arched plate in close contact with the bottom plate a^1. The arched plate has an opening a^4, which when the parts are assembled forms the mouth of a cavity or chamber adapted to receive the surplus plastic material used in making an impression of the roof of the mouth. A vent-hole d is formed in the bottom plate a^1, and communicates with the said chamber or cavity, its object being to permit the air in said chamber to be displaced by the plastic material which enters the chamber, thus permitting the plastic material to freely enter the chamber. When the device is used, the arched plate is placed upon the bottom plate a^1, and a dam b is formed by placing a strip of wax or other suitable material against the inner side of the flange b^1, said strip extending outwardly beyond the ends of the flange a. The pins c^2 hold the arched plate down upon the bottom plate a^1: but if desired, this may be supplemented by small pieces of wax placed, when melted, in the angle formed by the flange a and the marginal portion of the arched plate, thus holding the latter securely. The dam b supported by the flange b^1 serves to deflect the surplus plastic material into the cavity a^4. After the cup has been used, the dam b is removed, and the two parts are separated, so that all portions of the surfaces may be easily cleaned.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. A dental impression-cup having a hollow protuberance the upper surface of which forms the usual arch between the side walls of the cup, said protuberance having a closed bottom and an open end adjacent to the wider end of the cup, whereby the protuberance is adapted to receive and retain the surplus plaster that is displaced during the operation of taking an impression.

2. A dental impression-cup having a hollow protuberance opening toward the larger end of the cup, and a barrier adjacent to and extending across the opening or mouth of the protuberance and adapted to deflect displaced plaster into said mouth.

3. A dental impression-cup composed of a body portion having a bottom plate and a U-shaped flange, and an arched plate having a seat formed to bear upon the bottom plate of the body portion and a flange formed to co-operate with the ends of the U-shaped flange, said arched plate having an opening which forms the mouth of a chamber or cavity when the two parts are assembled, the said parts being separable.

4. A dental impression-cup comprising a body portion having a bottom plate, a U-shaped flange, and pins or lugs projecting inwardly from the flange over the bottom plate, and an arched plate having a marginal portion formed to bear upon the said bottom plate and engage the said pins, said arched plate having a flange and an opening, substantially as described.

5. A dental impression-cup comprising a bottom plate having a vent-opening

and a **U**-shaped flange, and an arched plate co-operating with said bottom plate in forming a chamber or cavity which communicates with the vent-opening, said arched plate having a flange and an opening which constitutes the mouth of said cavity.

Dated this 10th day of January 1901.

HASELTINE, LAKE & Co.,
45, Southampton Buildings, London, W.C., Agents for the Applicant.

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Fig. 1.

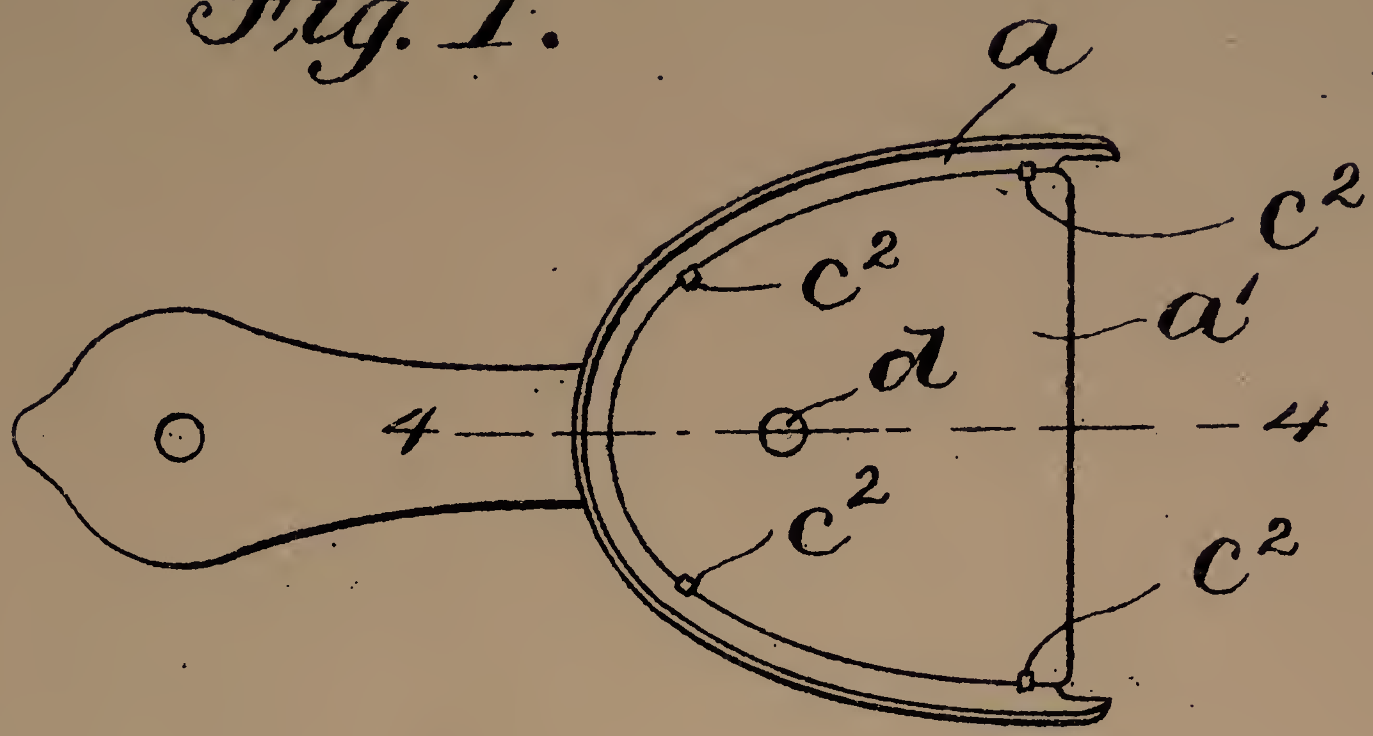


Fig. 2.

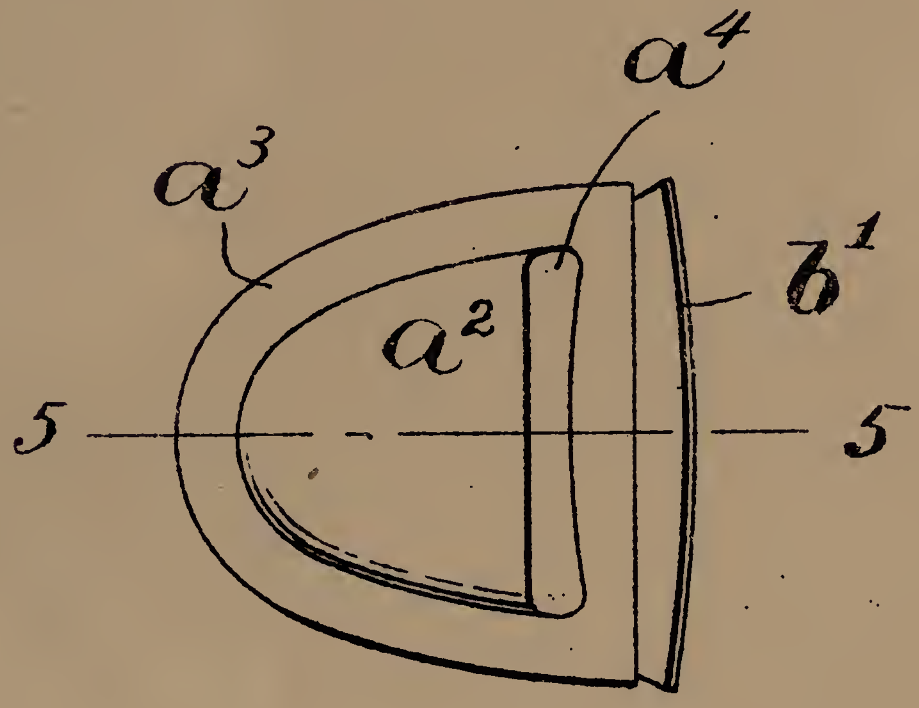


Fig. 4.

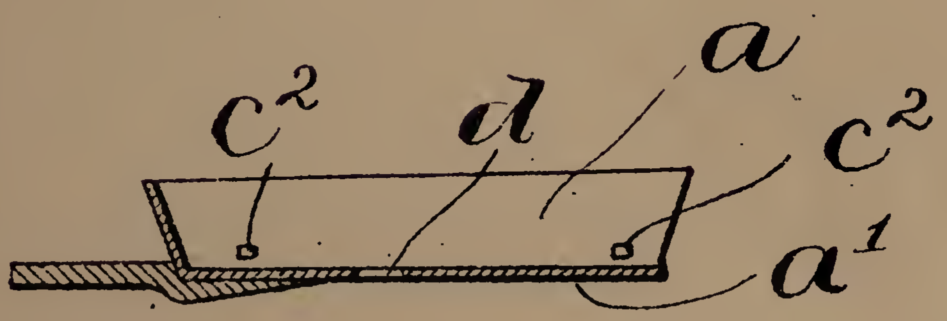


Fig. 5.

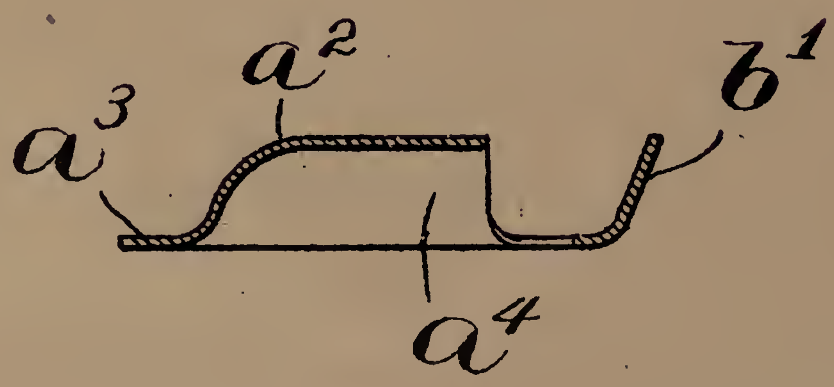
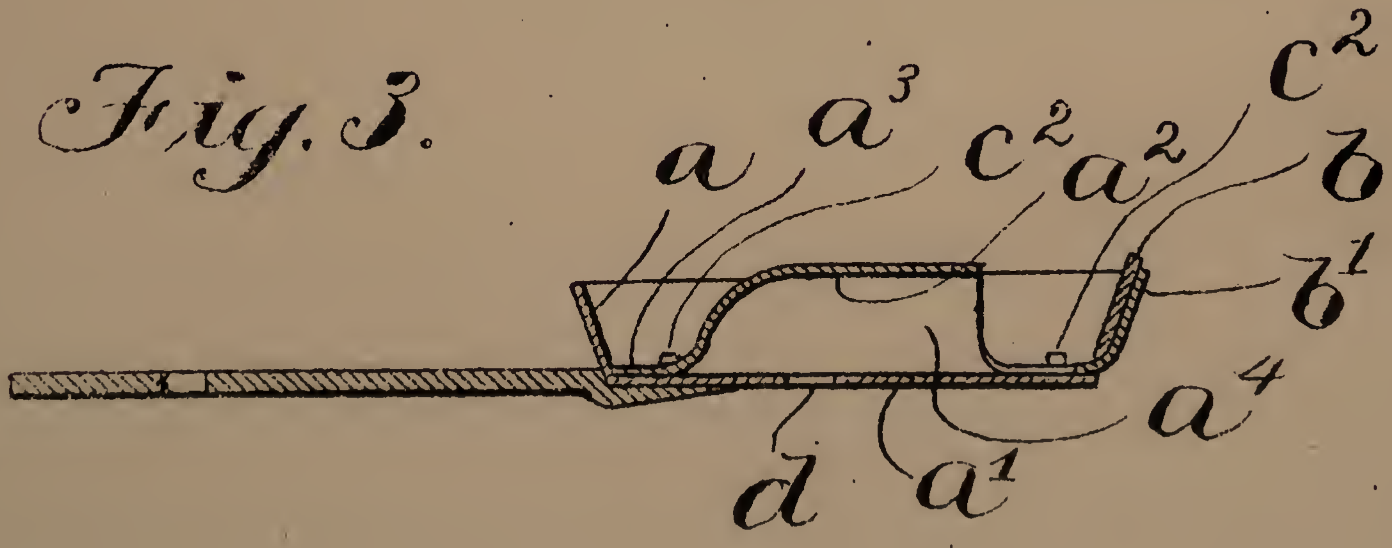


Fig. 3.



[This Drawing is a reproduction of the Original on a reduced scale.]

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